

## MSK Physical Exams Checklist

<b>Spine</b>	
<b>Lower Spine</b>	
<p><b><u>Inspect</u></b></p> <ul style="list-style-type: none"> <li>Side: (comment on Cervical Lordosis, Thoracic Kyphosis, Lumbar Lordosis)</li> <li>Back: Is there scoliosis?</li> <li>Look at gait (comfortable posture, position of spine, position of hip (flex hip to guard?))               <ul style="list-style-type: none"> <li>Stance phase on each side</li> <li>Swing phase on each side</li> <li>Watch head, trunk, arm, hip, knee and ankle movement</li> </ul> </li> </ul> <p><b><u>Palpate</u></b></p> <ul style="list-style-type: none"> <li>Find C7</li> <li>Hands on pelvis (L3)</li> <li>PSIS (L5)</li> <li>Feel if pelvis is level</li> <li>Feel the spinous processes</li> <li>Feel paraspinus muscles both sides</li> </ul> <p><b><u>ROM</u></b></p> <ul style="list-style-type: none"> <li>Flexion: Bend Forward (Where is the bend coming from? Measure distance from ground. )</li> <li>Extension: Bend Back</li> <li>Lateral Flexion (Side to Side with arms on side)</li> <li>Rotation (Sitting Position)</li> </ul>	<p><b><u>Special Tests</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Adam's Forward Bend Test</b> (scoliosis)</li> <li><input type="checkbox"/> <b>Schober's Test</b> (Lumbar spine flexibility)</li> </ul> <p><u>Nerve Roots</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Spinal nerve root exam</b> "Walk down the leg" (L2, L3, L4, L5, S1)</li> <li><input type="checkbox"/> <b>Reflex of knee and ankle</b></li> </ul> <p><u>Sciatic Nerve (L4-S3)</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Straight Leg Raise</b> (with Dorsi Flexion) + <b>Crossover Sign</b> (contralateral)</li> <li><input type="checkbox"/> <b>Bowstring</b></li> </ul> <p><u>Higher Nerve Roots</u></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Femoral Test</b> (for femoral neuropathy/ L2-L4)</li> </ul>
<b>C-Spine</b>	
<p><b><u>ROM</u></b></p> <ul style="list-style-type: none"> <li>Bring head down to chest</li> <li>ear down to shoulder</li> <li>Rotate Side to Side</li> </ul>	<p><b><u>Special Tests</u></b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Nerve Root Exam (C5, C6, C7, C8)</b></li> <li><input type="checkbox"/> <b>Spurling</b> (Foraminal compression test)</li> <li><input type="checkbox"/> <b>Ocput to Wall</b></li> </ul>

## Shoulder

### Inspect

- Look for anterior fullness, square shoulder, holding onto arm, Popeye sign?
- Look at Sulcus – should see a divot
- AC joint fullness (dislocation)?

### Palpation

- Sternoclavicular joint
- Clavicle
- Acromioclavicular joint
- Greater tuberosity of humerus
- Bicipital groove
- Glenohumeral joint line
- Spine of scapula
- Vertebral border of scapula
- Rotator cuff
- Subacromial & subdeltoid bursa

### ROM

- Abduction
- Adduction
- Flexion
- Extension
- Internal rotation
- External rotation

### AC Joint:

**Scarf Test**

### Glenohumeral Joint: (looking for dislocation)

**Apprehension Test (or axial loading)**

### Biceps

**Yergeron**

**Speed's Test**

### Rotator Cuff:

#### Impingement

**Neer's**

**Hawkins-Kennedy Test** (*Extra*)

### SupraSpinatus (abduction)

**Drop Arm Test**

**Empty Can Test/Jobe's**

### Subscapularis: (internal rotation)

**Lift-Off Test**

### Infraspinatus/Teres Minor (external rotation)

**Horn Blower's Test**

## Elbow

**Inspect** Bruising, carrying angle

**Palpate**

- Medial epicondyle
- Olecranon
- Lateral epicondyle
- Radial head
- Biceps tendon
- Ulnar nerve
- Olecranon bursa

**ROM**

- Flexion
- Extension
- Forearm supination
- Forearm pronation

**Special Tests**

- Medial Epicondylitis** (+ve test: pain over medial epicondyle)
  - aka “Golfer’s elbow”
  - Resisted wrist flexion
  - Resisted pronation
- Lateral Epicondylitis** (+ve test: pain over Lat. epicondyle)
  - Aka “Tennis elbow”
  - Resisted extension of 3<sup>rd</sup> finger
  - Resisted wrist extension
  - Resisted supination
- Colateral Ligament Stability (MCL/LCL)**
- Tinel Sign (Ulnar Nerve)**

## Wrist and Hand

**Inspect**

**Palpate**

- Extensor tendons
- Anatomic snuff box
- Radial Styloid
- ulnar styloid/Distal ulna
- Look for dinner fork sign (radial fracture)
- Hook of hamate
- 1<sup>st</sup> CMC joint
- Thenar/hypothenar muscles
- DIPs and PIPs

**ROM**

- Wrist: flexion, extension, ulnar deviation, radial deviation
- Finger: flexion, extension, abduction, adduction
- Thumb: flexion, extension, abduction, adduction, opposition

**Special Tests**

- Allen’s Test** (Vasculature of Hand)
- Finklestein’s Test** (for Dequervain’s -for tendonitis of the thumb extensors & abductors)
- Phalens Test, Tinel’s Test** (Carpel Tunnel)
- Axial Load/Grind Scafoid**

## Hip

### Inspect

#### Palpation

- ASIS
- Greater trochanter
- Ischial tuberosity

#### ROM

- Flexion
- Extension
- Abduction
- Adduction
- Internal rotation
- External rotation

### Special Tests

- Log Roll** (internal/external rotation)
- Trendelenburg test** (hip abductor/gluteus medius weakness)
- OBBER** (Tight IT Band)
- FABER** (SI Joint)
- Thomas Test** (hip flexion contracture)

## Knee

### Inspect

- with malleolus touching look if knees touch
- Looks for genu valgum/varum

#### Palpation

- Patella
- Prepatellar/infrapatellar/suprapatellar bursa
- Medial joint line
- Lateral joint line
- Pes anserine bursa
- Tibial tubercle
- Popliteal fossa
- Fibular head
- MCL/LCL
- Patellar & quadriceps tendon

#### ROM

- Flexion (Measure heel to buttock)
- Extension

### Special Tests

#### Joint Effusion:

- Ballottement/Tap Test**
- Knee Milking**
- Luminescence Test (Extra)**

#### Stability:

#### ACL/PCL

- Anterior/Posterior Drawer Test**
- Lachman Test**
- Pivot Shift (Extra)**

#### Meniscus

- McMurray** (Medial = Valgus + Ex rot, Lateral = Varus + Int. Rot)
- Thessaly Test (Extra)**

#### MCL/LCL

- Apply Valgus/ Varus force**

## Ankle

### Inspect

- Bruising over lateral and medial side, can you see the veins and contours well? look for hair growth or loss
- Observe Gate: Heel Toe Strike, flexion contracture?
- Look at Medial malleolus, Tibial posterior tendons, bumps around 1<sup>st</sup> MTP? Bunion/bunonettes?
- Look at syndesmotoc ligament, anterior talus fibular ligament
- Heel (sides of the heel for growth plates, plantar fasciitis, Achilles tendon)

### Palpation

- 1<sup>st</sup> MTP joint
- medial malleolus
- lateral malleolus
- deltoid ligament
- lateral ankle ligaments
- Achilles tendon
- Plantar fascia
- Heel pad

### ROM

- Plantar flexion
- Dorsiflexion
- Inversion
- Eversion
- Supination (combination of heel inversion, adduction & plantar flexion of forefoot)
- Pronation (heel eversion, abduction & dorsiflexion of forefoot)
- Flexion & extension of toes

### Special Tests

- Talar Tilt/Inversion & eversion stress testing** (calcaneofibular and deltoid stability)
- Anterior Drawer** (anterior talo-fibular ligament stability)
- Thompson Test** (Achilles Tendon)
- Tinel Sign** (Tarsal tunnel)
- Morton's Neuroma Test** (Extra)

### Nerve Roots

(See ASIA International Standards for Neurological Classification of Spinal Cord Injury)

C-Spine		
	Motor	Sensory
C5	Elbow Flexion	Lateral Deltoid
C6	Wrist Extension	Thumb (dorsum)
C7	Elbow Extension	Middle Finger (dorsum)
C8	Finger Flexion (Distal Phalanx of Middle Finger)	Pinky (dorsum)
T1	Finger Abduction	Medial Lower Arm

Lumbar Spine		
	Motor	Sensory
L2	Hip Flexion	Anterior Thigh (Midway up)
L3	Knee Extension	Medial Knee
L4	Ankle Dorsiflexion	Over the medial malleolus
L5	Big Toe Extensor	Dorsum of Foot
S1	Ankle Plantar Flexion	Lateral Foot (near heel)

### Peripheral Nerves

(Exam of the most distal extent of the nerve is the best approach. It will assume that the whole nerve is intact to that point)

Upper Limb		
	Motor	Sensory
<b>Axillary</b>	Abduct shoulder	Lateral deltoid
<b>Musculocutaneus</b>	Flex elbow	Volar-lateral forearm
<b>Radial</b>	Extension MCP Extension thumb	1 <sup>st</sup> dorsal web space
<b>Median</b>	Opposition thumb / pinky	Volar index finger tip
<b>Ulnar</b>	Adduct fingers (pinch paper)	Volar pinky finger tip

Lower Limb		
	Motor	Sensor
<b>Obturator</b>	Adduct hip	Medial thigh
<b>Femoral</b>	Extend knee	Medial calf
<b>Fibial Superficial</b>	Eversion foot	Dorsum foot
<b>Fibial Deep</b>	Dorsiflex foot / toes	Dorsal 1st web space
<b>Tibial</b>	Plantar flex foot / toes	Plantar foot